## Tropical Cyclone 04B

Tropical Cyclone (TC) 04B was the second tropical cyclone that developed over the Bay of Bengal during the 1999 season. This cyclone developed about 220 nm northwest of the Andaman Islands and reached a maximum intensity of 120 kt before making landfall over Gopalpur, India in the Ganjam district at 171730Z October.

JTWC issued a Tropical Cyclone Formation Alert at 151730Z October based on a Special Sensor Microwave/Imager (SSM/I) pass which depicted low level cloud lines over the northwest quadrant moving in toward the system center (Figure 1-04B-1). Subsequently, the first warning was issued at 152100Z October for a 45 kt cyclone.

Tropical Cyclone 04B initially moved west-northwestward at 8 to 12 knots under the influence of the subtropical ridge to the northwest. TC 04B then turned northward around 170600Z October, just before reaching the Orissa coastline. The cyclone slowed on 170000Z October and rapidly intensified to its maximum intensity of 120 kt. TC 04B remained at 120 kt while making landfall over the Orissa coast (Figure 1-04B-2). The cyclone then began to weaken moving northward and dissipating on the 19th of October near Aurangabad. JTWC issued the seventh and final warning at 180900Z October.

CNN and Reuters reported over 80 fatalities, severed communication lines, collapsed buildings and uprooted trees from the eastern Indian state of Orissa. The Ganjam district, specifically the port of Gopalpur, received the brunt of Tropical Cyclone 04B. Hundreds of houses and huts in the low-lying areas of Andhra Pradesh were also reported destroyed by flooding and three fatalities were reported to have occurred in that region.

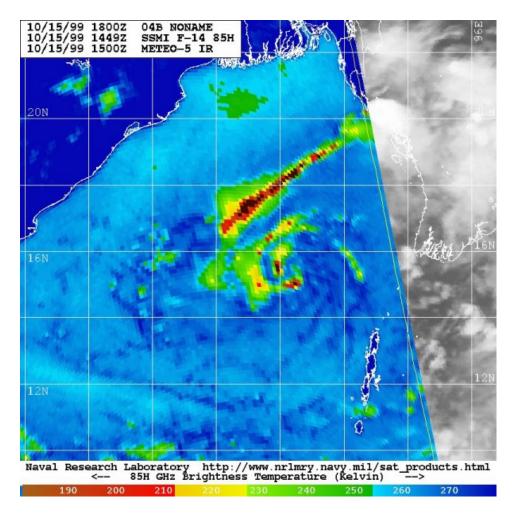


Figure 1-04B-1. 151449Z October combined SSM/I and infrared image from NRL reveals deep convection building in toward the low level circulation center from the northwest. Current intensity was 30 kt, but three hours later it was 45 kt.

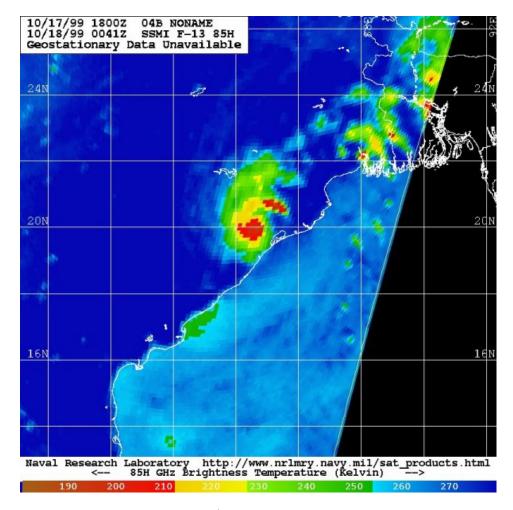


Figure 1-04B-2. 180041Z October SSM/I pass indicates little change in intensity and structure of the system after landfall. Current intensity was  $90~\rm kt$ .

